

JFW



S/N 10/762,211

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	Robert J. Peterka	Examiner:	Unknown
Serial No.:	10/762,211	Group Art Unit:	3763
Filed:	January 21, 2004	Docket:	1661.001US1
Title:	BIAS-PROBE ROTATION TEST OF VESTIBULAR FUNCTION		

INFORMATION DISCLOSURE STATEMENT

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicant respectfully requests that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicant requests that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicant with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Information Disclosure Statement considered.

The Examiner is invited to contact the Applicant's Representative at the below-listed telephone number if there are any questions regarding this communication.

The present application is either a U.S. national patent application filed after June 30, 2003 or an international application that entered the national stage under 35 U.S.C. § 371 after June 30, 2003. Thus, Applicant believes that the U.S. Patent & Trademark Office has waived the requirement under 37 C.F.R. 1.98 (a)(2)(i) for submitting a copy of each cited U.S. patent and each U.S. patent application publication. The waiver is provided in a pre-OG notice from the

INFORMATION DISCLOSURE STATEMENT

Serial No :10/762,211

Filing Date: January 21, 2004

Title: BIAS-PROBE ROTATION TEST OF VESTIBULAR FUNCTION

Page 2

Dkt: 1661.001US1

U.S. Patent & Trademark Office entitled "Information Disclosure Statements May Be Filed Without Copies of U.S. Patents and Published Applications in Patent Applications filed after June 30, 2003" and dated July 11, 2003. Applicant acknowledges the requirement to submit copies of foreign patent documents and non-patent literature in accordance with 37 C.F.R. 1.98(a)(2).

Respectfully submitted,

ROBERT J. PETERKA

By his Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(612) 349-9592

Date 22 June 2004 By David R. Cochran
David R. Cochran
Reg. No. 46,632

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 22 day of June, 2004.

Kyrstin Ryan
Name

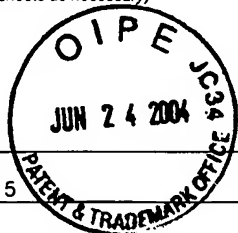
Kyrsti Ryan
Signature

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Sheet 1 of 5

Complete if Known

Application Number	10/762,211
Filing Date	January 21, 2004
First Named Inventor	Peterka, Robert
Group Art Unit	3763
Examiner Name	Unknown

Attorney Docket No: 1661.001US1

US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
--------------------	---------------------	------------------	---	-------	----------	----------------------------

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T ²
--------------------	---------------------	------------------	---	-------	----------	----------------

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		AW, S T., "Head impulses reveal loss of individual semicircular canal function", <u>Journal of Vestibular Research</u> , 9(3), (1999), pp. 173-180	
		AW, S T., et al., "Three-dimensional vector analysis of the human vestibuloocular reflex in response to high-acceleration head rotations. II. responses in subjects with unilateral vestibular loss and selective semicircular canal occlusion", <u>Journal of Neurophysiology</u> , 76(6), (December 1996), pp.4021-4030	
		BALOH, R W., et al., "Changes in the human vestibulo-ocular reflex after loss of peripheral sensitivity", <u>Annals of Neurology</u> , 16(2), (August 1984), pp. 222-228	
		BALOH, ROBERT W., et al., "Clinical Evaluation of Hearing (Ch.6) & Differential Diagnosis of Vestibular System Disease (Ch.7)", In: <u>Clinical Neurophysiology of the Vestibular System</u> , Contemporary Neurology Series, P.A. Davis Company, Philadelphia, PA., (1979), pp. 153-173	
		BALOH, R W., et al., "Impulsive and sinusoidal rotatory testing: a comparison with results of caloric testing", <u>Laryngoscope</u> , 89(4), (April 1979), pp. 646-654	
		BENSON, A J., "Motion Sickness", In: <u>Vertigo / edited by M.R. Dix and J.D. Hood</u> , Chichester ; New York : Wiley, (1984), pp. 391-426	
		BEYNON, G J., et al., "A clinical evaluation of head impulse testing", <u>Clinical Otolaryngology & Allied Sciences</u> , 23(2), (April 1998), pp. 117-122	
		BLACK, F O., et al., "Effects of unilateral loss of vestibular function on the vestibulo-ocular reflex and postural control", <u>Annals of Otology, Rhinology & Laryngology</u> , 98(11), (November 1989), pp. 884-889	
		BLANKS, R H., et al., "Planar relationships of the semicircular canals in man", <u>Acta Otolaryngol (Stockholm)</u> , 80, (1975), pp. 185	
		BOUVERESSE, A , et al., "Pseudorandom rotational stimuli of the vestibulo-ocular reflex in humans: normal values of the transfer function", <u>Acta Oto-Rhino-Laryngologica Belgica</u> , 52(3), (1998), pp. 207-214	
		CLARKE, A H., et al., "Video-oculography-an alternative method for measurement of three-dimensional eye movements", In: <u>Oculomotor control and cognitive processes : normal and pathological aspects / edited by Roberto Schmid and Daniela Zambbarbieri</u> , Amsterdam ; New York : North-Holland ; New York, N.Y. U.S.A., (1991), pp. 431-443	

EXAMINER**DATE CONSIDERED**

Substitute Disclosure Statement Form (PTO-1449)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	10/762,211
Filing Date	January 21, 2004
First Named Inventor	Peterka, Robert
Group Art Unit	3763
Examiner Name	Unknown

Sheet 2 of 5

Attorney Docket No: 1661.001US1

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		CLEVELAND, W S., "Robust locally weighted regression and smoothing scatterplots", <u>Journal of the American Statistical Association</u> , 74(368), (1979), pp. 829-836	
		CRANE, B T., et al., "Human horizontal vestibulo-ocular reflex initiation: effects of acceleration, target distance, and unilateral deafferentation", <u>Journal of Neurophysiology</u> , 80(3), (September 1998), pp. 1151-1166	
		CURTHOYS, I S., et al., "Semicircular duct and ampulla dimensions in cat, guinea pig and man", <u>Journal of Morphology</u> , 151(1), (January 1977), pp. 17-34	
		CURTHOYS, I S., et al., "Vestibular compensation: a review of the oculomotor, neural, and clinical consequences of unilateral vestibular loss", <u>Journal of Vestibular Research</u> , 5(2), (March-April 1995), pp. 67-107	
		FERNANDEZ, C , et al., "Physiology of peripheral neurons innervating semicircular canals of the squirrel monkey. II. Response to sinusoidal stimulation and dynamics of peripheral vestibular system", <u>Journal of Neurophysiology</u> , 34(4), (July 1971), pp. 661-675	
		FETTER, M , et al., "Recovery from unilateral labyrinthectomy in rhesus monkey", <u>Journal of Neurophysiology</u> , 59(2), (February 1988), pp. 370-393	
		FOSTER, C A., et al., "Functional loss of the horizontal doll's eye reflex following unilateral vestibular lesions", <u>Laryngoscope</u> , 104(4), (April 1994), pp. 473-478	
		FURMAN, J M., et al., "Interlaboratory variability of rotational chair test results II: analysis of simulated data.", <u>Otolaryngology - Head & Neck Surgery</u> , 122(1), [erratum appears in <u>Otolaryngol Head Neck Surg</u> 2001 Nov;125(5):580], (January 2000), pp. 23-30	
		FURMAN, J M., et al., "Laboratory evaluation. I: Electronystagmography and rotational testing.", In: <u>Disorders of the vestibular system / edited by Robert W. Baloh, G. Michael Halmagyi</u> , New York : Oxford University Press, (1996), pp. 191-210	
		GALIANA, H L., et al., "A bilateral model for central neural pathways in vestibuloocular reflex", <u>Journal of Neurophysiology</u> , 51(2), (February 1984), pp. 210-241	
		GALIANA, H L., "A nystagmus strategy to linearize the vestibulo-ocular reflex", <u>IEEE Transactions on Biomedical Engineering</u> , 38(6), (June 1991), pp. 532-543	
		GALIANA, H L., et al., "A reevaluation of intervestibular nuclear coupling: its role in vestibular compensation", <u>Journal of Neurophysiology</u> , 51(2), (February 1984), pp. 242-259	
		GOLDBERG, J M., et al., "Physiology of peripheral neurons innervating semicircular canals of the squirrel monkey. 3. Variations among units in their discharge properties", <u>Journal of Neurophysiology</u> , 34(4), (July 1971), pp. 676-684	

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional) ² Applicant is to place a check mark here if English language Translation is attached

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/762,211
Filing Date	January 21, 2004
First Named Inventor	Peterka, Robert
Group Art Unit	3763
Examiner Name	Unknown

Sheet 3 of 5

Attorney Docket No: 1661.001US1

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		GOLDBERG, J M., et al., "Physiology of peripheral neurons innervating semicircular canals of the squirrel monkey. I. Resting discharge and response to constant angular accelerations", <u>Journal of Neurophysiology</u> , 34(4), (July 1971), pp. 635-660	
		GRAYBIEL, A , et al., "Diagnostic criteria for grading the severity of acute motion sic", <u>Aerospace Medicine</u> , 39(5), (May 1968), pp. 453-455	
		GUYOT, J P., et al., "Test-retest reliability of vestibular autorotation testing in healthy subjects", <u>Otolaryngology - Head & Neck Surgery</u> , 117(6), (December 1997), pp. 704-707	
		HALMAGYI, G M., et al., "A clinical sign of canal paresis", <u>Archives of Neurology</u> , 45(7), (July 1988), pp. 737-739	
		HASLWANTER, T , "Mathematics of three-dimensional eye rotations", <u>Vision Research</u> , 35(12), (June 1995), pp. 1727-1739	
		HATAMIAN, M , et al., "Design considerations for a real-time ocular counterroll instrument", <u>IEEE Transactions on Biomedical Engineering</u> , 30(5), (May 1983), pp. 278-288	
		HENRY, D F., et al., "Closed-loop caloric, harmonic acceleration and active head rotation tests: norms and reliability", <u>Otolaryngology - Head & Neck Surgery</u> , 109(6), (December 1993), pp. 975-987	
		HONRUBIA, V , et al., "Vestibulo-ocular reflexes in peripheral labyrinthine lesions: I. Unilateral dysfunction", <u>American Journal of Otolaryngology</u> , 5(1), (January-February 1984), pp. 15-26	
		HONRUBIA, V , et al., "Vestibulo-ocular reflexes in peripheral labyrinthine lesions: III. Bilateral dysfunction.", <u>American Journal of Otolaryngology</u> , 6(5), (September-October 1985), pp. 342-352	
		JENKINS, H A., et al., "Evaluation of multiple-frequency rotatory testing in patients with peripheral labyrinthine weakness", <u>American Journal of Otolaryngology</u> , 3(3), (May-June 1982), pp. 182-188	
		JONGKEES, L B., et al., "Electronystagmography", <u>Acta otolaryngologica(Stockholm)</u> , Supplement 189, (1964), 109 pgs.	
		LYSAKOWSKI, A , et al., "Physiological identification of morphologically distinct afferent classes innervating the cristae ampullares of the squirrel monkey", <u>Journal of Neurophysiology</u> , 73(3), (March 1995), pp. 1270-81	
		MCCLURE, J A., et al., "Vestibular asymmetry. Some theoretical and practical considerations", <u>Archives of Otolaryngology</u> , 109(10), (October 1983), pp. 682-687	
		MINOR, L B., et al., "Horizontal vestibuloocular reflex evoked by high-acceleration rotations in the squirrel monkey. I. Normal responses", <u>Journal of Neurophysiology</u> , 82(3), (September 1999), pp. 1254-1270	

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional) ² Applicant is to place a check mark here if English language Translation is attached

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/762,211
Filing Date	January 21, 2004
First Named Inventor	Peterka, Robert
Group Art Unit	3763
Examiner Name	Unknown

Sheet 4 of 5

Attorney Docket No: 1661.001US1

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		MINOR, L B., et al., "Influence of static head position on the horizontal nystagmus evoked by caloric, rotational and optokinetic stimulation in the squirrel monkey", <u>Experimental Brain Research</u> , 82(1), (1990), pp. 1-13	
		MINOR, L B., et al., "Vestibular-nerve inputs to the vestibulo-ocular reflex: a functional-ablation study in the squirrel monkey", <u>Journal of Neuroscience</u> , 11(6), (June 1991), pp. 1636-1648	
		MOORE, S T., et al., "A geometric basis for measurement of three-dimensional eye position using image processing", <u>Vision Research</u> , 36(3), (February 1996), pp. 445-459	
		MOORE, S T., et al., "VTM--an image-processing system for measuring ocular torsion", <u>Computer Methods & Programs in Biomedicine</u> , 35(3), (July 1991), pp. 219-230	
		O'LEARY, D P., et al., "Analysis of vestibulo-ocular reflex using sweep frequency active head movements", <u>Advances in Oto-Rhino-Laryngology</u> , 41, (1988), pp. 179-183	
		O'LEARY, D P., "Test/retest reliability of the vestibular autorotation test in healthy subjects", <u>Otolaryngology--head and neck surgery : official journal of American Academy of Otolaryngology--Head and Neck Surgery</u> , 119(1), (July 1998), pp. 147-148	
		PAIGE, G D., "Nonlinearity and asymmetry in the human vestibulo-ocular reflex", <u>Acta Oto-Laryngologica</u> , 108(1-2), (July-August 1989), pp. 1-8	
		PETERKA, R J., et al., "Age-related changes in human vestibulo-ocular and optokinetic reflexes: pseudorandom rotation tests", <u>Journal of Vestibular Research</u> , 1(1), (1990-1991), pp. 61-71	
		PETERKA, R J., et al., "Age-related changes in human vestibulo-ocular reflexes: sinusoidal rotation and caloric tests", <u>Journal of Vestibular Research</u> , 1(1), (1990-91), pp. 49-59	
		PETERKA, R J., et al., "Calibration techniques for video oculography", <u>Journal of Vestibular Research</u> , 6, (1996), S75	
		REY, C G., et al., "Transient analysis of vestibular nystagmus", <u>Biological Cybernetics</u> , 69(5-6), (1993), pp. 395-405	
		ROBINSON, D A., "A method of measuring eye movement using a scleral search", <u>IEEE Transactions on Biomedical Electronics</u> , 10, (1963), pp. 137-145	
		ROBINSON, D A., "The mechanics of human saccadic eye movement", <u>The Journal of Physiology</u> , (1964), pp. 245-264	
		ROBINSON, D A., "The use of matrices in analyzing the three-dimensional behavior of the vestibulo-ocular reflex", <u>Biological Cybernetics</u> , 46(1), (1982), pp. 53-66	
		SAADAT, D, et al., "Comparison of vestibular autorotation and caloric testing", <u>Otolaryngology - Head & Neck Surgery</u> , 113(3), (September 1995), pp. 215-222	

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional) ² Applicant is to place a check mark here if English language Translation is attached

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/762,211
Filing Date	January 21, 2004
First Named Inventor	Peterka, Robert
Group Art Unit	3763
Examiner Name	Unknown

Sheet 5 of 5

Attorney Docket No: 1661.001US1

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		SPSS, INC., "SYSTAT 8.0 : statistics", <u>Chicago, IL : SPSS, Inc., (1998), pp. 363-366</u>	
		STOCKWELL, C W., "Interpretation and usefulness of rotational testing", <u>In:Handbook of balance function testing / [edited by] Gary P. Jacobson, Craig W. Newman, Jack M. Kartush, San Diego, Calif. : Singular Pub. Group,(1997), pp. 249-258</u>	
		TOMLINSON, R D., et al., "Analysis of human vestibulo-ocular reflex during active head movements", <u>Acta Oto-Laryngologica, 90(3-4), (September-October 1980), pp. 184-190</u>	
		WADE, S W., et al., "Time constant of nystagmus slow-phase velocity to yaw-axis rotation as a function of the severity of unilateral caloric paresis", <u>American Journal of Otology, 20(4), [erratum appears in Am J Otol 2000 Jan;21(1):153],(July 1999), pp. 471-478</u>	
		WILSON, VICTOR J., et al., "Biophysics of the Peripheral End Organs (Ch.3) & Mechanoneural Transduction and the Primary Afferent Response (Ch.4)", <u>In: Mammalian Vestibular Physiology, Plenum Press, New York, New York.,(1979),pp. 41-69, pp.92-107</u>	
		WOLFE, J W., et al., "Low-frequency harmonic acceleration in the evaluation of patients with peripheral labyrinthine disorders", <u>In:Nystagmus and vertigo : clinical approaches to the patient with dizziness / edited by Vicente Honrubia and Mary A.B. Brazier, New York : Academic Press,(1982), pp. 95-105</u>	

EXAMINER**DATE CONSIDERED**

Substitute Disclosure Statement Form (PTO-1449)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.¹ Applicant's unique citation designation number (optional) ² Applicant is to place a check mark here if English language Translation is attached



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant

Robert J. Peterka

Title

BIAS-PROBE ROTATION TEST OF VESTIBULAR FUNCTION

Docket No.: 1661.001US1

Serial No.: 10/762,211

Filed: January 21, 2004

Due Date: N/A

Examiner: Unknown

Group Art Unit: 3763

MS Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

☒ A return postcard.

☒ An Information Disclosure Statement (2 pgs.), Form 1449 (5 pgs.), and copies of 59 cited documents enclosed.

Please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Customer Number 21186

By:

Atty: David R. Cochran

Reg. No. 46,632

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 22 day of June, 2004.

Name

Kirstin Ryan

Signature

Kirstin Ryan

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

(GENERAL)